

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-006415**Date Inspected:** 27-Apr-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2230**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR**CWI Name:** Steve Barnett**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Hinge-K Components**Summary of Items Observed:**

Summary of Items Observed: On this date, Caltrans Quality Assurance Inspector (QA) Clete Henke was present at Oregon Iron Works, Inc. (OIW) in Clackamas, OR for observation of fabrication of the Hinge K Pipe Beams and related activities including in process welding and OIW Quality Control (QC) visual and nondestructive testing. The following observations were recorded:

OIW Fabrication Shop-Bay 3**Hinge-K Pipe Beam Fuse Sub-Assembly 120A-4:**

a125 stiffener ring to a124-13 Fuse

The QA Inspector intermittently monitored OIW welder Yuriy Bannikov (WID B61) during completion of Submerged Arc Welding (SAW) at weld joint WM3-12 joining a125 stiffener ring to a124-13 Fuse Section.

Welder B61 deposited SAW fill and cover passes in the flat (1G) position in accordance with approved welding procedure 4020. With completion of WM3-12, Fuse Section a124-13 stiffener ring connections were complete.

The QA Inspector observed as OIW QC Inspector Steve Barnett performed Magnetic particle Testing (MT) and Visual Inspection (VT) of completed cover passes at welds WM3-12 through WM3-17. Mr. Barnett stated that he had located no rejectable indications. The QA Inspector subsequently performed 100% VT at the locations noted above finding the completed welds to be in general compliance with contract documents. The QA Inspector noted that OIW personnel removed Fuse section a124-13 from the welding fixture and replaced it with a124-2. Preheat was initiated on a124-2 shortly before the end of the shift.

Hinge-K Pipe Beam Fuse Sub-Assembly 120A-4:

a/b125 stiffener ring to a124-4 Fuse

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The QA Inspector was notified by OIW QC Inspector Steve Barnett that QC Magnetic particle Testing (MT) and Visual Inspection (VT) had been completed on a124-4 Fuse Section with no rejectable indications located. The QA Inspector subsequently performed 100% VT of completed cover passes at welds WM3-02 through WM3-11, finding the completed welds to be in general compliance with contract documents.

Hinge-K Pipe Beam Base Assembly 102A-1:

a111-1 forging to a110-4 base plate

The QA Inspector observed no production activity on the assembly noted above.

Hinge-K Pipe Beam Base Assembly 102A-2:

a111-2 forging to a110-2 base plate

The assembly noted above was idle for the duration of the shift.

Hinge-K Pipe Beam Fuse Assembly 120A-2:

a124-3 to a124-11

The QA Inspector noted that one rejectable indication located during preliminary Ultrasonic Testing (UT) on circumferential CJP weld WM3-18 had been excavated during day shift. The QA Inspector intermittently observed as OIW welder Bui Liem (WID B10) ground the excavated area in an attempt to create a weldable profile. OIW QC Inspector Steve Barnett performed Magnetic particle Testing (MT) at the completed excavation, locating no rejectable indications. Welder B10 had initiated preheat at the affected area shortly before the end of the shift. The QA Inspector noted that OIW QC Inspector Steve Barnett was regularly monitoring and recording in-progress preheat as welder B10 brought the area up to temperature.

Hinge-K Pipe Beam Fuse Assembly 120A-3:

a124-10 to a124-12

Fuse Assembly 120A-3 was complete and idle pending NDT.

Material, Equipment, and Labor Tracking:

The QA Inspector performed verification of personnel involved with this project and equipment in use. The QA Inspector accounted for 3 OIW production personnel and 1 Quality Control Inspector present on this date.



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Summary of Conversations:

As noted in the body of the report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677 , who represents the Office of Structural Materials for your project.

Inspected By:	Henke,Clete
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Quality Assurance Inspector

Reviewed By:	Adame,Joe
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QA Reviewer
